PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

	Applicant's or agent's file reference 72150PC	FOR FURTHER see Form PCT/ISA/220 as well as, where applicable, item 5 below.						
,	International application No.	International filing date (day month year)	(Earliest) Priority Date (day month year)					
	PCT/SE 2004/000732	12 May 2004	12 May 2003					
	Applicant							
	Atlas Copco Rock Drills AB Patent et al							
•	This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.							
	This international search report consists of a total of sheets.							
	It is also accompanied by	y a copy of each prior art document cited i	in this report.					
'	1. Basis of the report							
	a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.							
	The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).							
	b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.							
	2. Certain claims were found unsearchable (see Box No. II)							
	3. Unity of invention is lacking (see Box No. III)							
	4. With regard to the title,							
	<u> 1324</u>	ubmitted by the applicant.						
	the text has been established by this Authority to read as follows:							
,								
			·					
	5. With regard to the abstract,							
		ubmitted by the applicant.						
	the text has been establis	hed, according to Rule 38.2(b), by this Au e month from the date of mailing of this in	thority as it appears in Box No. IV. The atternational search report, submit					
	6. With regard to the drawings,							
	a. the figure of the drawings to be published with the abstract is Figure No.							
	x as suggested by the	**						
	as selected by this Authority, because the applicant failed to suggest a figure.							
		Authority, because this figure better charact	terizes the invention.					
	b none of the figures is to be published with the abstract.							

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/000732

A. CLASSIFICATION OF SUBJECT MATTER						
IPC7: E21D 21/00, E21F 17/02 According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIELDS SEARCHED						
Minimum documentation searched (classification system followed by	classification symbols)					
IPC7: E21D, E21F						
Documentation searched other than minimum documentation to the	extent that such documents are included in	n the fields searched				
SE,DK,FI,NO classes as above						
Electronic data base consulted during the international search (name	of data base and, where practicable, search	n terms used)				
		İ				
EPO-INTERNAL, WPI DATA, PAJ						
C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category* Citation of document, with indication, where app	ropriate, of the relevant passages	Relevant to claim No.				
A US 3651651 A (L. TRIPLETT), 28 M (28.03.1972), figures 3,4, a		1-9				
						
A US 5997219 A (D. KRZYSZTALOWICZ 7 December 1999 (07.12.1999) abstract	ET AL), , figures 1,3,	1-9				
	SE 443398 B (ATLAS COPCO AB NACKA), 24 February 1986 (24.02.1986), figures 1,4, abstract					
A SE 427764 B (ATLAS COPCO AB, NAC (02.05.1983), figure 1, abst		1-9				
Further documents are listed in the continuation of Box C. X See patent family annex.						
* Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand						
to be of particular relevance "E" earlier application or patent but published on or after the international filing date	the principle or theory underlying the "X" document of particular relevance: the	invention claimed invention cannot be				
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other	considered novel or cannot be considered when the document is taken alon "Y" document of particular relevance: the	e				
special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means	considered to involve an inventive ste combined with one or more other suc being obvious to a person skilled in the	p when the document is h documents, such combination				
"P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family						
Date of the actual completion of the international search 5 August 2004	Date of mailing of the international search report 0 6 -08- 2004					
Name and mailing address of the ISA/	Authorized officer					
Swedish Patent Office						
Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Björn Lindkvist / MRo Telephone No. + 46 8 782 25 00					

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT Information on patent family members

03/07/2004

International application No.

PCT/SE 2004/000732

US	3651651	A	28/03/1972	NONE		
US	5997219		07/12/1999	AU	2237097 A	10/09/1997
03	333,613	•	31, 22, 222	CA	2246996 A	28/08/1997
				EP	0882173 A	09/12/1998
				JP	2000504800 T	18/04/2000
				NO	975258 A	17/11/1997
				SE	504605 C	17/03/1997
				SE	9600640 A	17/03/1997
				WO	9731177 A	28/08/1997
				SE	508558 C	12/10/1998
				SE	9700085 A	16/07/1998
SE	443398	 В	24/02/1986	AT	10664 T	15/12/1984
36	443336	D	24,02,1300	ÂÜ	545968 B	08/08/1985
				AÜ	7505481 A	18/03/1982
				BR	8105714 A	25/05/1982
	•			CA	1180909 A	15/01/1985
				DE	3167630 D	00/00/0000
1				EP	0047727 A,B	17/03/1982
ļ.			•	FI	75400 B,C	29/02/1988
				FI	812763 A	09/03/1982
				IN	153175 A	09/06/1984
1				JP	1582190 C	11/10/1990
			ě.	JP	2005238 B	01/02/1990
				JP	57077798 A	15/05/1982
				NO	159201 B,C	29/08/1988
				NO	812997 A	09/03/1982
l .				PL	134505 B	31/08/1985
İ				PL	232949 A	15/03/1982
1				SE	8105344 A	09/03/1982
				US	4423986 A	03/01/1984
				ZA	8106176 A	29/09/1982

INTERNATIONAL SEARCH REPORT Information on patent family members

03/07/2004

International application No. PCT/SE 2004/000732

SE	427764	В	02/05/1983	ΑT	7943 T	15/06/1984
JL		_	02, 00, 1000	AU	542263 B	14/02/1985
				AU	5624680 A	11/09/1980
	•			CA	1233037 A,C	23/02/1988
				CA	1245486 A	29/11/1988
				DE	3068155 D	00/00/0000
				EP	0016742 A,B	01/10/1980
				FI	72576 B,C	27/02/1987
				FI	800717 A	10/09/1980
			,	JP	1577229 C	24/08/1990
				JP	2000520 B	08/01/1990
				JP	55123000 A	22/09/1980
			•	NO	157348 B,C	23/11/1987
				NO	800606 A	10/09/1980
				PL	125315 B	30/04/1983
	•			PL	222538 A	01/12/1980
				SE	7902129 A	10/09/1980
				SU	1144625 A	07/03/1985
*				US	4459067 A	10/07/1984
	*			US	4509889 A	09/04/1985
				US	4634317 A	06/01/1987
				ZA	8001380 A	28/01/1981